CALIFORNIA ENVIRONMENTAL QUALITY ACT
INITIAL STUDY

The Department of Toxic Substances Control (DTSC) has completed the following document for this project in accordance with the California Environmental Quality Act (CEQA) [Pub. Resources Code, div. 13, § 21000 et seq] and accompanying Guidelines [Cal. Code Regs., tit. 14, § 15000 et seq].

PROJECT TITLE: Xstrata Recycling Inc. Series A Standardized Permit		CALSTARS CODING: 200265
PROJECT ADDRESS: 1695 Monterey Hwy	CITY: San Jose	COUNTY: Santa Clara
PROJECT SPONSOR: Xstrata Recycling Inc.	CONTACT: Ms. Sejal Choksi	PHONE: (408) 998-4930

APPROVAL ACTION UNDER CONSIDERATION BY DTSC:

☐ Initial Permit Issuance ☒ Permit Renewal ☐ Permit Modification ☐ Closure Plan
☐ Removal Action Workplan ☐ Remedial Action Plan ☐ Interim Removal ☐ Regulations
☐ Other (specify):

STATUTORY AUTHORITY:

☒ California H&SC, Chap. 6.5 ☐ California H&SC, Chap. 6.8 ☐ Other (specify):

DTSC PROGRAM/ ADDRESS: Office of Permitting	CONTACT: Alejandro Galdamez	PHONE: (510) 540-3933

PROJECT DESCRIPTION: The issuance of a Standardized Hazardous Waste Facility Permit (Permit) to Xstrata Recycling Inc. (Xstrata or Facility) by the Department of Toxic Substances Control (DTSC), as authorized by the California Health and Safety Code, Chapter 6.5. Xstrata currently operates under a previously issued Permit that is still in effect because Xstrata applied for the new Permit pursuant to California Code of Regulations, title 22, section 66270.51. The new Permit will authorize Xstrata to continue to treat, store, and ship liquid and solid hazardous waste off-site to an authorized Treatment, Storage, or Disposal Facility (TSDF).

The issuance of the new Permit will authorize Xstrata to store up to a maximum of 13,370 gallons of liquid hazardous waste and 253 tons of solid hazardous waste. In addition, the new Permit will authorize Xstrata to treat 75,816 gallons per month of liquid hazardous waste and 2,295 tons per month of solid hazardous waste. Storage capacity is the maximum volume of hazardous waste that may be stored in tanks and containers at any one time.

The new Permit will also allow for the installation and operation of the following additional treatment equipment:

- Hammer Mill, which will be used to decrease the size of solid hazardous waste;
- Screen, which will be used to separate oversize material that comes out of the Hammer Mill;
- Rotary Sampler, which will be used to extract homogeneous representative samples; and
- Dust Conditioning Unit, which will be used to control dust produced from the Hammer Mill process and thus allow more hazardous waste to be captured and processed.

Background

Xstrata generates and receives precious metal bearing acid solutions that are stored in designated areas before and after treatment. Treatment of acid solutions includes pH adjustment, precipitation, neutralization and/or evaporation to convert precious metals in to solid form. Xstrata uses tray furnaces to bake/roast solids containing combustible organics, dry inorganic sludge, and to evaporate water from neutral and alkaline solutions. Xstrata also melts

hazardous waste solids, sludge, scrap metal, and excluded recyclable materials in crucible furnaces to recover, refine, or separate metals. Xstrata employs mechanical processes such as grinding, milling, screening, and blending of ash, sludge and other solids in miscellaneous units to prepare and collect a representative sample of metals for analysis to facilitate further recovery operations. Dry and wet additives may be combined with treated material to improve handling and flow properties.

In addition, Xstrata uses additional mechanical equipment to treat Universal Waste Electronic Devices (UWEDs), electronic scrap, scrap metal, electronic recyclable material, and solid hazardous waste and processes these materials in an independent unit.

Following are additional changes from the current Permit that Xstrata plans to implement, pending approval of the proposed project by DTSC:

- Electroplating: Plans call for a portable unit that can be put in the existing cyanide processing tanks. The change will involve additional equipment but will not alter the treatment capacity of the overall cyanide tank system.
- Container Treatment of Acid Solutions: Plans call for the use of new containers (two 55-gallon containers) as an alternative to the existing tank to treat acid solutions.
- Evaporation of Caustic/Cyanide Solutions: Plans call for the enhancement of evaporation of water from waste solution by the introduction of a contactor that would consist of a drum or set of discs on a slowly rotating shaft mounted within the confines of the tanks to increase the surface area for evaporation.
- Conversion of the Acid Waste Storage Tank Area to a container storage area: Plans call for storing containers in a tank area that was previously used to store acids.
- Changes to Tray Furnace: Plans call for changing the operating temperature for the afterburners, modifying the tray furnace in the primary chamber to accommodate multiple levels of trays, and modifying the second tray furnace by adding a center partition in order to split the primary chamber into two independent chambers.
- Milling and Sampling Area: Plans call for new dust conditioning equipment, a Ballmill, a screen, and a rotary sampler in the Mechanical and Miscellaneous unit.

UNITS:

The Permit will allow Xstrata to continue operating 12 hazardous waste management units, designated as the following:

Unit Name	Activity Description	Physical Description	Storage or Treatment Capacity
Unit #1 Cyanide/Caustic Container Storage	Cyanide and Caustic Wastes solutions are stored in Containers varying from 1-gallon to 55 gallon drums. The containers are placed in pallets to prevent contact with floor. After the chemical treatment process, the supernatant liquid is pumped into clean drums and stored in this unit.	This unit is a 67 ft by 30 ft rectangular area with a 3 inch berm and is constructed of concrete and covered with an epoxy coating.	1,760 Gallons of Storage Capacity

Unit # 2 Acid Waste Storage	This unit is designated to store neutral and acid hazardous waste such as Waste Acid, Potassium Iodide, and Neutral Solutions, Slag from treatment of acid and cyanide bearing waste. The waste can be stored in various containers sized raging from less than 1-gallon bottles up to 55-gallon drums. The slag can be stored in 5-gallon pails up to one cubic yard boxes.	This unit is a 50 ft by 16 ft rectangular area. The concrete floor is coated with a compatible epoxy and a sump is provided in the center of the room	1,540 gallons of Storage Capacity and 5,500 pounds of Storage Capacity for slag.
Unit # 3 Solid Waste Storage	This unit stores hazardous waste free of free liquids such as hazardous sludge, filters, resins, and wipes, bughouse dust, slag, solder dross, batteries, and UWED's. Hazardous waste can be stored in a variety of containers from 5 gallon pails to 55-gallon drums, one cubic yard boxes, and Intermediate Bulk Container bags of up to 5 cubic yards.	This unit is a 34 ft by 54 ft rectangular area covered by a roof structure. The base of the area is covered with concrete and sealed with a chemical resistant coating	200 Cubic yards.
Unit # 4 Spent Cyanide Treatment and Storage	The spent solution resulting from the precipitation and stripping operations is transferred to this unit which is the designated storage area for cyanide and caustic wastes generated in the Cyanide Stripping Room. Four tanks are used for treating and storing spent Cyanide and compatible caustic solutions. Once treatment is completed, the solution is shipped to another TSD facility in a bulk tanker truck.	This unit is a 21 ft by 34 ft rectangular area with 4 storage treatment tanks. The floor is constructed of concrete and is coated with an epoxy sealer. Entire area is covered by a roof, tarps, and a wall on two sides to prevent entry of rain.	6,652 Gallons of Storage Capacity 14,810 Gallon/month of Treatment Capacity
Unit # 5 Secondary Waste Storage	This unit is used to store solid or liquid hazardous wastes, batteries, UWED's, and other compatible material. The wastes are stored using various storage devices including 5 to 20 gallon pails, 5 to 55-gallon steel or plastic drums, bulk boxes and bags, and roll off-bins (up to 30 cubic yard). Liquid wastes are stored in secondary containment pallets	This unit is 19 ft by 21 ft rectangular area with a roof. Walls or tarps and berms are provided on three sides to minimize rain from entering the unit.	50 cubic yards of Storage Capacity

Unit # 6 Cyanide Treatment Tanks	Cyanide treatment is performed in different batches and when ready for processing, the waste solution is pumped into one of the eight process tanks. The container is triple rinsed to meet empty container criteria and the rinsed water is introduced into the tank where the waste was pumped. The pH is the solution is checked prior to transfer to assure compatibility and it is adjusted to 12 or above by adding sodium hydroxide as the first treatment step. A portable electroplating unit may be placed in any of the tanks to recover metals. Alternatively or as polishing step, chemical precipitating agents are added to recover them. Heat and compressed air or mechanical agitation may also be supplied to increase reaction rates. After the reaction is complete, the solids are allowed to settle in the tank bottom. The supernatant liquid may be filtered in order to recover solid particulates. The filter is used to prevent solids from transferring when pumping the supernatant liquid into an empty container for storage. The filter, when it has reached its filtering capacity, will be treated the same way as the sludge. The residual sludge and filter is transferred to a different container for further processing at a different unit for shipment.	This unit is composed of 8 tanks raging in capacity from 50 gallons to 449 gallons. The tanks are rectangular in shape and constructed of polypropylene, fiberglass, and/or fiberglass reinforced plastic	1,715 Gallons of Storage Capacity 2,083 Gallons/month of Treatment Capacity
Unit # 7 Acid Processing Room	The acid and neutral solutions are subject to neutralization and chemical precipitation processes to recover precious metals.	This unit consists of one 115-gallon polypropylene treatment tank and a covered area for treatment and storage of	200 Gallons of Storage Capacity

	The acid/neutral solutions are transferred into the acid processing tank or containers. A suitable reagent is added to adjust the pH and/or precipitate metals. After the reaction is complete, the barren solution is pumped through a filter into containers; the settled sludge is removed and moved to another part of the Facility. In some cases when the solution contains more than one recoverable metal, the precipitation may be conducted selectively to recover a particular precious metal.	Two 55-gallon containers. The room measures 30 ft by 24 feet and has a concrete floor covered with a layer of epoxy with a 3 inch berm.	665 gallons/month of Treatment Capacity
Unit # 8 Tray Furnaces	Metal-bearing materials mixed with combustible or moisture content is treated in two indirect-fired natural gas tray furnaces. This process results in a dry friable residue, suitable for either milling and sampling, or smelting. Baking/roasting solids containing combustible organic, evaporation of moisture from sludge and/or evaporation of water from neutral and alkaline solutions to produce a dry solid amenable to further recovery operations. Tray furnaces are operated in roasting mode for roasting materials with combustible organics such as wipes, adhesives, resin, filter media, etc. Material in tray is placed inside the primary chamber and heated to over 500 degrees Fahrenheit. The secondary chamber is operated at a higher temperature of 1600 degrees Fahrenheit to destroy organic emissions. Tray furnaces are operated in a drying mode to evaporate moisture from inorganic sludge. These furnaces are also operated in evaporation mode to concentrate alkaline, neutral and/or cyanide solutions.	This unit consists of two Tray Furnaces. Each consists of a primary and a secondary afterburner chamber, and a dropout chamber. The primary chamber is heated by a set of burners which bake, roast and dry materials held in trays. The secondary chamber serves as abatement devices destroying organic vapors and gases that are formed in the primary chamber. The gases from the secondary chamber pass through a drop out chamber which allows any large embers to drop out of the gas stream without passing on to the baghouse. The baghouse collects particulates before releasing the cleaned gas stream to the atmosphere.	2,950 Pounds/hour of treatment capacity

Unit # 9 Crucible Furnace	This unit processes scrap metal, other exempt material, and hazardous wastes in crucible furnaces. These furnaces use an indirect gas flame to melt into a molten bath for sampling and refining. Fluxes may be added to facilitate separation of desired metals from byproduct metal oxide slag. Copper may be added to form a homogeneous melt. A sample may be drawn for assay and value settlement with the generator. The melt is cast into ingots.	This unit consists of four indirect-fired natural gas crucible furnaces.	6,000 pounds/hour of treatment capacity
Unit # 10 Refinery Furnace	The refinery furnaces are used to melt metals and sludge batches that are too small or high grade for the large crucibles. Materials for this process are typically sludge obtained by precipitation, tripping of cyanide, caustic, neutral, and/or acidic solutions. Precious metal bars, cones, or pellets are the primary product of the operation. The ingots are sold, or further process in-house using an aqua regia process.	This unit consists of two refinery furnaces that use an indirect natural gas flame.	70 pounds/hour of treatment capacity
Unit # 11 Ball Mills, Screen, and Sampler	Material is loaded into the mill and tumbled to reduce the particle size for subsequent screening and sampling. The Ball Mill feed area, discharge area and conveyors are equipped with ventilation system and baghouse to collect dust generated during material feed, grinding and conveying activities.	This unit consists of two Ball mills inside an enclosure. A conveyor belt attached to the ball mills is used to convey material to a screen. In addition a Rotary Sampler.	16,000 pounds/hour of treatment capacity
Unit # 12 Mechanical and Miscellaneous Processes	This unit processes a variety of material including sweeps/dust, slag, dross, and other solid hazardous wastes, UWEDs, scrap metal, and other exempt material. Material is loaded into the Muller or mills to reduce the particle size for subsequent screening and sampling	This unit consists of a Pan Muller, Small screen, Large Screen, Blender, Drum Blender, two rotary samplers, and two ball mills.	10,000 Pounds/hour of treatment capacity

ENVIRONMENTAL IMPACT ANALYSIS:

1. Aesthetics

Project Activities Likely to Create an Impact: None.

Description of Baseline Environmental Conditions: Xstrata Recycling operates in an area characterized by extensive industrial use and zoned as HI Heavy Industrial by the city of San Jose. The activities at the Facility are conducted indoors during regular business hours in an existing building with a covered roof. The exterior yard areas are lighted at night as a security measure and are of the same intensity as that of other companies surrounding the Facility. The entire property and surrounding area is paved and developed with fencing surrounds the entire Facility (see Figure 2, 3 and 7). The area surrounding the Facility consists primarily of industrial structures, industrial storage areas. A self service auto dismantling operation is adjacent to the Facility on the northeast side and a mobile home park is located west of the Facility parking area, thus will not degrade the existing visual character or quality of the site and its surroundings. There are no scenic highways or scenic vistas, trees, rock outcroppings or natural areas including scenic resources near the Facility. Therefore, no further analysis is deemed necessary.

Analysis as to whether or not project activities would:

a. Have a substantial adverse effect on a scenic vista.

Impact Analysis:

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☐ No Impact

b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings and historic buildings within a state scenic highway.

Impact Analysis:

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☐ No Impact

c. Substantially degrade the existing visual character or quality of the site and its surroundings.

Impact Analysis:

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☐ No Impact

d. Create a new source of substantial light of glare that would adversely affect day or nighttime views in the area.

Impact Analysis:

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated

☐ Less Than Significant Impact
☐ No Impact

References Used:

2. Agricultural Resources

Project Activities Likely to Create an Impact: None.

Description of Baseline Environmental Conditions: The Facility is developed and paved in an existing hazardous waste area designated as “HI” Heavy Industrial. The proposed permit will not have an impact and will not convert prime farmland, unique farmland, or farmland of statewide importance or conflict with existing zoning, agriculture or the Williamson Act contract because it is developed in an area for with industrial uses with no agricultural resources at or near the Facility. Therefore, no further analysis is deemed necessary.

Analysis as to whether or not project activities would:

a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.

   Impact Analysis:

   Conclusion:
   ☐ Potentially Significant Impact
   ☐ Potentially Significant Unless Mitigated
   ☐ Less Than Significant Impact
   ☐ No Impact

b. Conflict with existing zoning or agriculture use, or Williamson Act contract.

   Impact Analysis:

   Conclusion:
   ☐ Potentially Significant Impact
   ☐ Potentially Significant Unless Mitigated
   ☐ Less Than Significant Impact
   ☐ No Impact

c. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural uses.

   Impact Analysis:

   Conclusion:
   ☐ Potentially Significant Impact
   ☐ Potentially Significant Unless Mitigated
   ☐ Less Than Significant Impact
   ☐ No Impact

References Used:

3. Air Quality

Project Activities Likely to Create an Impact:

Existing Activities Allowed by Current Permit

- Treatment: Treatment of 75,816 gallons per month of liquid hazardous waste and 2,295 tons per month of solid hazardous waste. The Facility evaporates water and chemical acid solutions to recover precious. Tray furnaces bake dry solid into combustible organics.
- Storage: Storage of up to a maximum of 13,370 gallons of liquid hazardous waste and 253 tons of solid hazardous waste at any one time.
- Transportation: Transport of hazardous waste to the Facility for treatment and shipment off-site to an authorized treatment, storage, or disposal facility (TSDF).

Proposed Additional Project Activities

- Electroplating: Plans call for a portable unit which can be put in the existing cyanide processing tanks. The change will involve additional equipment but will not alter the treatment capacity of the overall cyanide tank system.
- Evaporation of Caustic/Cyanide Solutions: Plans call for the enhancement of evaporation of water from waste solution by the introduction of a contactor that would consist of a drum or set of discs on a slowly rotating shaft mounted within the confines of the tanks to increase the surface area for evaporation.
- Changes to Tray Furnaces: Plans include changing the operating temperature for the afterburners, modifying the primary chamber of the tray furnace to accommodate multiple levels of trays, and modifying the second tray furnace by adding a center partition in order to split the primary chamber into two independent chambers.

Description of Baseline Environmental Conditions:

The Facility is located within the jurisdiction of the Bay Area Air Quality District (BAAQMD). The BAAQMD is responsible for enforcing, within its jurisdiction, air quality standards established by the California Air Resources Board (CARB) and the federal Environmental Protection Agency (EPA). These air quality standards contain averaging times and threshold concentration levels for certain criteria pollutants that cannot be exceeded by proposed projects. The BAAQMD falls within the San Francisco Bay Area Air Basin (SFBAAB). The SFBAAB has been designated by the CARB as being in non-attainment with California Ambient Air Quality Standards (CAAQS) for ozone and PM10. The federal EPA has designated the SFBAAB as being in non-attainment with Federal Ambient Air Quality Standards (FAAQA) for ozone. Since ozone and PM10 have been identified as non-attainment in the SFBAAB, specific standards were developed by the BAAQMD to control sources of these pollutants from proposed future projects. Further, because ozone is an identified non-attainment pollutant, standards are also required for ozone precursors such as carbon monoxide (CO) and volatile organic compounds (VOCs). The BAAQMD established such standards for projects proposed within the jurisdiction. Regulation 6 of the BAAQMD regulations limits particulate matter by emission rate, Regulation 8 limits the emissions of organic pollutants (CO and VOCs), and odorous substances are regulated by the BAAQMD under Regulation 7.

Federal and State Ambient Air Quality Standards and Attainment Status

FEDERAL AND STATE AMBIENT AIR QUALITY STANDARDS AND ATTAINMENT STATUS

Pollutant	Averaging Time	State Standard	Attainment Status	Federal Primary Standard	Attainment Status
Ozone (O_3)	1-Hour 8-Hour	0.09 ppm 0.07 ppm	N (Serious) –	– 0.075 ppm	– N
Carbon Monoxide (CO)	1-Hour 8-Hour	20 ppm 9.0 ppm	A	35 ppm 9.0 ppm	U/A
Nitrogen Dioxide (NO_2)	Annual Average 1-Hour	0.03 ppm 0.18 ppm	– A	0.053 ppm –	U/A –
Sulfur Dioxide (SO_2)	Annual Average 24-Hour 3-Hour 1-Hour	– 0.04 ppm 0.25 ppm	– A A	0.03 ppm 0.14 ppm – –	A A A –
Respirable Particulate Matter (PM_{10})	Annual Average 24-Hour	20 $\mu g/m^3$ 50 $\mu g/m^3$	N	– 150 $\mu g/m^3$	U
Fine Particulate Matter ($PM_{2.5}$)	Annual Average 24-Hour	12 $\mu g/m^3$ –	N –	15 $\mu g/m^3$ 35 $\mu g/m^3$	N
Lead	30-day Average Calendar Quarter	1.5 $\mu g/m^3$ –	A –	– 1.5 $\mu g/m^3$	– –
Sulfates	24-Hour	25 $\mu g/m^3$	A	No National Standards	
Hydrogen Sulfide	1-hour	0.03 ppm	U		
Vinyl Chloride	24-hour	0.01 ppm	–		
Visibility Reducing Particulate Matter	8-hour	Extinction coefficient of 0.23 per kilometer-visibility of 10 miles or more	U		

Notes: ppm = parts per million, $\mu g/m^3$ = micrograms per cubic meter.
Source: BAAQMD 2010(a), 2010(b)

Additionally, Regulation 11, Hazardous Pollutants, sets emission and/or performance standards for hazardous pollutants including non-ferrous metal melting furnace emissions. (See Table 1) Currently the Facility has a valid BAAQMD permit, number A1732, which sets conditions for operations. The BAAQMD permit states that tray furnaces shall not exceed 650 lb/hr or 1,774.5 ton of waste to be treated. The BAAQMD permit states tray furnaces shall dry water-laden, non-volatile, non-combustible inorganic sludge. Emissions from the afterburn shall not exceed NOx : 50 ppmvd @ 15% O_2 (0.2 lb/MMBTU) and CO : 350 ppmvd @ 15% O_2 (0.8 lb/ MMBTU).

For the Acid Processing Operation the BAAQMD permit limits the operation by not allowing it to exceed 16,000 gallons of hazardous waste to be processed in a 12 month calendar period. In addition, the acid processing operation shall be abated by the sodium hydroxide solution scrubber during operation process. The BAAQMD permit also stipulates that dust control hood and tray tipper be abated by the existing baghouse at all times.

In addition, the BAAQMD permit indicates that all particulate matter emitted from the Crucible Furnaces shall be routed through the baghouse under negative pressure. The baghouse shall be maintain in good condition and all filter bags shall be checked for tears, holes, abrasions, and scuffs and repair as needed. Outlet grain loading for baghouse shall not exceed 0.002 grains per dry standard cubic foot by performing a BAAQMD pre-approved outlet particulate emission source test @ least every 4 years.

Analysis as to whether or not project activities would:

a. Conflict with or obstruct implementation of the applicable air quality plan.

Impact Analysis: As noted above, the Facility falls within the BAAQMD jurisdiction and must comply with all local, state, and federal air quality standards in all facility operations. Treatment of accepted precious and non-precious metals is conducted in indirect fired natural gas crucible furnaces to melt the metals and/or sludge into metal ingots of different alloys; indirect fired natural gas tray. DTSC permit requirements provide that the Xstrata test and analyze exhaust emissions from each stack of the crucible and tray furnaces baghouse and each stack of the cyanide and acid scrubbers using EPA or BAAQMD methods, whichever is more stringent. Pursuant to the draft Facility permit,

the test process and analyses shall be performed by the Facility at least once over two (2) years. Based upon required compliance with applicable air standards for the district and the provisions of the permit to operate, the proposed permit renewal will not conflict with or obstruct implementation of the applicable air quality plans.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation.

Impact Analysis: The Facility will be required to be in compliance with all applicable BAAQMD air standards and permit requirements, and therefore no violations of any air quality standards are anticipated.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

c. Result in cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).

Impact Analysis: The proposed permit activities will not result in a cumulatively net increase of any criteria pollutant. The permit currently uses bag houses to filter the emissions and will not exceed quantitative thresholds for ozone precursors. (Figure 4) In addition the Facility has a valid BAAQMD permit number A1732 which point out conditions for operations. Permit states that tray furnaces shall not exceed 650 lb/hr or 1,774.5 ton or waste to be treated. The to tray furnaces shall dry water-laden, non-volatile, non-combustible inorganic sludge. Emissions from the afterburn shall not exceed NOx : 50 ppmvd @ 15% O_2 (0.2 lb/MMBTU) and CO : 350 ppmvd @ 15% O_2 (0.8 lb/ MMBTU). For the Acid Processing Operation the BAAQMD permit limits the operation by not allowing it to exceed 16,000 gallons of hazardous waste to be processed in a 12 month calendar period. In addition the acid processing operation shall be abated by the sodium hydroxide solution scrubber during operation process. The BAAQMD permit also stipulates that dust control hood and tray tipper be abated by the existing baghouse at all times. In addition the BAAQMD permit indicates that all particulate matter emitted from the Crucible Furnaces shall be routed through the baghouse under negative pressure. The baghouse shall be maintain in good condition and all filter bags shall be checked for tears, holes, abrasions, and scuffs and repair as needed. Outlet grain loading for baghouse shall not exceed 0.002 grains per dry standard cubic foot by performing a BAAQMD pre-approved outlet particulate emission source test @ least every 4 years.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

d. Expose sensitive receptors to substantial pollutant concentrations.

Impact Analysis: A residential mobile home park is located approximately 250 feet to the west beyond the Facility parking area. However, because the Facility operations are contained inside the building and will be conducted in full compliance with all applicable air standards in the district; it is not anticipated that any of the proposed permit activities will result in exposure of sensitive receptors to substantial pollutant concentrations.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact

☒ No Impact

e. Create objectionable odors affecting a substantial number of people.

Impact Analysis: The Facility reclaims precious and base metals from a variety of metal wastes, which are generally not odor-generating wastes. All treatment and storage processes are conducted indoors or within a covered, bermed area. Xstrata is authorized by the BAAQMD to dry and evaporate only water-laden material. In addition, the Furnaces that do treat waste that has combustible organic materials have a secondary chamber, also known as an after burn chamber in which combustible organics are destroyed by operating this chamber at 1600 degrees Fahrenheit. Emissions from truck traffic are limited to the time it takes for the trucks to arrive and leave the Facility, and are not different from emissions from cars and trucks traveling along city streets. Therefore, the project will not create objectionable odors affecting a substantial number of people.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

f. Result in human exposure to Naturally Occurring Asbestos (see also Geology and Soils, f.).

Impact Analysis: Based on information obtained from the California Department of Conservation, Division of Mines and Geology, there is no naturally occurring asbestos in the Facility area. The Permit activities do not involve any disturbance to the soil. There will be no possibility of liberation of any naturally occurring asbestos.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

References Used:

- BAAQMD Web Site, Rule and Regulations, regulations 6, 7, 8, 11
- Xstrata Recycling Inc. Facility Operations;
- Hazardous Waste Facility Permit
- BAAQMD Link to California Air Resources Board, Link to Department of Conservation, Geological Survey, Governor's Office of Planning and Research, "Addressing Naturally Occurring Asbestos in CEQA Documents".
- BAAQMD Permit A1732, 1/1/2012

4. Biological Resources

Project Activities Likely to Create an Impact: None.

Description of Baseline Environmental Conditions: The Facility consists of a building and a concrete fenced area with no vegetation or wild life. The Facility operates in an area characterized by extensive industrial use and zoned as "HI" Heavy Industrial by the city of San Jose. There are no biological resources within a mile from the Facility boundary. In accordance to the Riparian Delineation, the proposed project is 1 mile away from both the Guadalupe River and the Coyote Creek. The Guadalupe River is due west from the proposed project and the Coyote creek located on the East. (Figure 5 and 6).

Analysis as to whether or not project activities would:

a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California

Department of Fish and Game or U.S. Fish and Wildlife Service.

Impact Analysis: A California Department of Fish and Game Natural Diversity Database system (CNDDB) Rarefind Survey search conducted on 4/7/2011 indicated that the Facility and surrounding area contains no candidate, sensitive, or special status species of plants or animals. The proposed project will not have any adverse effects directly, indirectly or through habitat modifications to any species since the current proposed permit is not expanding beyond the inside of the Facility and is composed of a building and a concrete fenced area with no vegetation or wild life.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

Impact Analysis: The proposed Permit will not have any adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service because the Xstrata Facility is located in an industrial area with no biological resources within a mile from the Facility boundary. In accordance to the Riparian Delineation, the proposed project is 1 mile away from both the Guadalupe River and the Coyote Creek. The Guadalupe River is due West from the proposed project and the Coyote creek located on the East. (Figure 5 and 6).

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

Impact Analysis: There a no wetlands within a 5 mile radius of the Facility. The closest wet land is located 10 miles north from the proposed project and therefore section 404 of the Clean Water Act does not apply. In addition, the proposed project does not have any run off, all units are protected from rain and secondary containment with epoxy coating is provided to capture any rain accumulation which will be tested or treated as hazardous waste.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

Impact Analysis: There is no movement of any native resident or migratory fish or wildlife species within a 5 mile radius from the Facility and therefore the interference to the movement of any native resident or migratory fish or wildlife does not apply.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

e. Conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Impact Analysis: The Facility is located in an area zoned by the City of San Jose as HI Heavy Industrial. The permit renewal will not authorize any new construction that will conflict with local policies or ordinances protecting biological resources.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Impact Analysis: The City of San Jose does not have provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan for the area where the Facility is located. The City of San Jose has zoned the area where the Facility is located as HI Heavy Industrial. Therefore, the new Permit will not conflict with an adopted Habitat Conservation Plan.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

References Used:

- California Department of Fish and Game, Natural Diversity Database, Full Condensed Survey Report for Selected Elements, April 07, 2011

5. Cultural Resources

Project Activities Likely to Create an Impact: None.

Description of Baseline Environmental Conditions: Xstrata Recycling Inc., is located in a HI Heavy Industrial area of San Jose that is currently developed, paved, and enclosed with a locked gated fence. The parking area surrounds the Facility with other industrial storage and businesses located beyond the parking area boundary. The proposed permit does not include any activities that will directly or indirectly destroy any unique paleontological resource or site or unique geologic feature or cause a substantial adverse change to archeological resources. On June 2011, DTSC received a response from the Native American Heritage Commission (NAHC) stating that the Sacred Lands file did not locate archeological resources in the project area. The proposed permit does not include any project activities that will unearth or disturb any human remains. Therefore, no further analysis is deemed necessary.

Analysis as to whether or not project activities would:

a. Cause a substantial adverse change in the significance of an archeological resource pursuant to 15064.5.

Impact Analysis:

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☐ No Impact

b. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

c. Impact Analysis:

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☐ No Impact

d. Disturb any human remains, including those interred outside of formal cemeteries.

Impact Analysis:

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☐ No Impact

References Used:

6. Geology and Soils

Project Activities Likely to Create an Impact: None

Description of Baseline Environmental Conditions: The city of San Jose is located in the Santa Clara Valley, a relatively flat alluvial basin, bounded by the Santa Cruz Mountains to the southwest and west, the Diablo Mountain Range to the east, and San Francisco Bay to the north. The project site is approximately 105-110 feet above mean sea level (msl).
Soils on the project site are comprised of hard gravelly silty clay and hard sandy silty clay (down to 14 feet) and medium dense clayey san and wet dense sand at depths of 14 to 19 feet. Groundwater is found at around 10 to 15 feet below the current ground surface. This soil type is characterized by good drainage, moderate shrink/swell potential.
The San Francisco Bay Area is classified as Zone 4 for seismic activity, the most seismically active region in the United States. Strong ground shaking can therefore be expected at the site during moderate to severe earthquakes in the general region. The significant earthquake that occur in the Bay Area are generally associated with crustal movement along well defined active fault zones of the San Andreas Fault System, which regionally trends in a northwesterly direction. The Facility is located within a seismic hazard zone as designated by the California Division of Mines and Geology (CDMG). The nearest active fault zones to the Facility are the Hayward, Monte Vista-Shannon, Calaveras and San Andreas, which are located approximately 5.0 miles east, 8.0 miles southwest, 9.0 miles east, and 12.0 miles southwest of the Facility, respectively. During a major earthquake on a segment of one of the nearby faults, strong to very strong shaking is expected to occur at the site. The site is not located within a currently designated Alquist-Priolo Earthquake Fault Zone, or in a Santa Clara County Fault Hazard Zone.
Liquefaction is the transformation of water-saturated soil from a solid to a liquid state during ground shaking. Soils most susceptible to liquefaction are loose to moderately dense, saturated granular soils with poor drainage, such as silty sands and gravels capped by or containing seams of impermeable sediment. The Facility is located within the Santa Clara County liquefaction hazards zone. In the event of a major earthquake, the project site would be susceptible to liquefaction hazards including liquefaction induced settlement.
Lateral spreading occurs when a continuous layer of soil liquefies at depth and the solid layers above move towards an unsupported face, such as a shoreline slope or creek channel, or in the direction of a regional slope or gradient. Lateral spreading is commonly associated with liquefaction. The Facility is relatively flat and is more than one mile from the nearest waterway. Based on these circumstances, the potential for lateral spreading at the project site is low.
Differential compaction can occur during strong ground shaking in loose, clean, granular deposits above the water table, resulting in ground surface settlement. The chances of this occurring at the Facility site are low because soil deposits encountered at the site are sufficiently clayey.
Groundwater exists in the project site and varies in depth between 10 and 15 feet below the current ground surface. Groundwater in the Facility's area generally flows to the south-southwest.
The Santa Clara Valley was formed when sediments derived from the Santa Cruz Mountains and the Mt. Hamilton-Diablo Range were exposed by continued tectonic uplift and regression of the inland sea that had previously inundated this area.

As a result of this process, the topography of the City valley floor is relatively flat and there are no significant mineral resources within the vicinity of the Facility.

Analysis as to whether or not project activities would:

a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

- ❖ Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. (Refer to Division of Mines and Geology Special Publication 42).
- ❖ Strong seismic ground shaking.
- ❖ Seismic-related ground failure, including liquefaction.
- ❖ Landslides.

Impact Analysis: There are no faults within 3,000 feet of the Facility. The Facility is not located within an Alquist-Priolo Special Studies zone or within 200 feet of a fault which has had displacement in Holocene time. Pavement at the Facility and secondary containment made impervious by an epoxy coating designed to prevent any release of hazardous waste to soil or groundwater in the event of severe ground shaking. All liquid hazardous waste is stored and treated in areas that are designed to contain any spill. Liquid hazardous waste that is stored in container areas where there is no berm will be stored on pallets that act as a secondary containment to prevent the drum from spilling in case of ground movement. In addition, an automatic shut-off valve is installed at the main gas line that shuts off the gas in case of a severe earthquake. The project area is flat; therefore, there is no threat of landslides occurring due to project activities.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

b. Result in substantial soil erosion or the loss of topsoil.

Impact Analysis: The proposed permit activities do not include any construction or expansion of the Xstrata Recycling Inc facility where a potential for soil erosion or loss of topsoil could occur. In addition, all of the proposed modifications are located within the existing Facility boundary.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.

Impact Analysis: The Facility is not located on unstable soil. The geology of Santa Clara Valley (within which the Facility resides) is characterized by relatively young unconsolidated alluvial deposits (clay, silt, sand and gravel) underlain at depth by older poorly consolidated to consolidated alluvial deposits. As previously noted, the proposed permit activities do not include any construction or expansion of the Xstrata Recycling Inc. Facility and, therefore, no possibility exists that the project would result in on or off-site landslide, lateral spreading, or subsidence. The Facility is located within the Santa Clara County liquefaction hazards zone. In the event of a major earthquake, the Facility would be susceptible to liquefaction hazards including liquefaction induced settlement. The buildings were designed and constructed in accordance with a design-level geotechnical investigation prepared for the site, which identifies specific design features including site preparation, compaction, trench excavation, foundation and subgrade design,

drainage and pavement design. The Facility was built in conformance with the requirements of the Building Code and, therefore, will not expose people or property to significant impacts associated with the geologic conditions of the site.

Conclusion:

☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.

Impact Analysis: Many high clay content soils within the Santa Clara Valley are expansive, so it is possible the Facility is located on expansive soil. However, the project does not involve physical changes of the site or alteration of any ground feature, and the buildings were built in conformance with the Uniform Building Code at the time of their construction. Therefore, there is no substantial risk to life or property.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of water.

Impact Analysis: The permit activities will not incorporate the use of any septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of water.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

f. Be located in an area containing naturally occurring asbestos (see also Air Quality, f.).

Impact Analysis: According to the Department of Conservation, the Facility is not located in an area containing naturally occurring asbestos. The proposed permit activities do not involve any disturbance to the soil, there will be no possibility of liberation of any naturally occurring asbestos.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

References Used:

- Hazardous Waste Facility Permit Modification, June 28, 2002
- Environmental Information Document, 2006
- Final Initial Study, April 4, 1994
- Facility Operations Manual, May 2005
- BAAQMD Link to California Air Resources Board, Link to Department of Conservation, Geological Survey, Governor's Office of Planning and Research, "Addressing Naturally Occurring Asbestos in CEQA Documents".

- Sun Garden Demolition Initial Study, City of San Jose, March 2002
- Soils of Santa Clara 1968
- County of Santa Clara Website. Office of Planning, Geological Hazards Zones. Accessed June 30, 2011. http://www.sccgov.org/portal/site/planning/agencychp/?path=%2Fvy%2FPlanning%2C%20Office%20of%20%28DEP%29%2FMaps%20%26%20GIS%2FGeologic%20Hazards%20Zones%28Maps%20%26%20Data%29%2FLiquefaction%20Hazard%20Zones

7. Greenhouse Gas Emissions

Project Activities Likely to Create an Impact:

Existing Activities Allowed by Current Permit

- Treatment: Treatment of 75,816 gallons per month of liquid hazardous waste and 2,295 tons per month of solid hazardous waste. Evaporation of water and chemical acid solutions to recover precious. Tray furnaces bake dry solid into combustible organics.
- Storage: Storage of up to a maximum of 13,370 gallons of liquid hazardous waste and 253 tons of solid hazardous waste.
- Transportation: Transport of hazardous waste to the Facility for treatment and shipment off-site to an authorized treatment, storage, or disposal facility (TSDF).

Proposed Additional Project Activities

- Electroplating: Plans call for a portable unit that can be put in the existing cyanide processing tanks. The change will involve additional equipment but will not alter the treatment capacity of the overall cyanide tank system.
- Evaporation of Caustic/Cyanide Solutions: The proposed project calls for enhancing evaporation of water from waste solution by the introduction of a contactor which would consist of a drum or set of discs on a slowly rotating shaft mounted within the confines of the tanks to increase the surface area for evaporation.
- Changes to Tray Furnaces: Changes to furnaces include the change of operating temperature for the afterburners, the primary chamber of the tray furnace will be modified to accommodate multiple levels of trays, and the second tray furnace may be modified by adding a center partition in order to split the primary chamber into two independent chambers.

Description of Baseline Environmental Conditions: The Bay Area Air Quality Management District (BAAQMD) has recommended CEQA thresholds of significance for assessing operational-related, and plan level emissions criteria for pollutants and ozone precursors and greenhouse gases (GHGs). However, the BAAQMD does not currently recommend GHG thresholds, citing lack of sufficient evidence to determine a level at which emissions are significant. The BAAQMD published updated CEQA Guidelines in December 2010 to assist lead agencies in evaluating air quality impacts of projects and plans proposed in the Santa Clara Air Basin. The updated guidelines provide screening criteria to provide lead agencies and project applicants with a conservative indication of whether the proposed project could result in potentially significant air quality impacts.

Establishing control measures for GHG would help project proponents, lead agencies, and the public by proactively identifying effective, feasible GHG emission reduction measures. Emission reductions achieved through implementation of Best Management Practices (BMPs) would be pre-quantified, thus negating the need for project specific quantification of GHG emissions. As such, California's goals and strategies for systematic statewide reduction of GHG emissions are embodied in the combination of BMP, Executive Order S-3-05 and Assembly Bill (AB) 32 or Executive Order S-03-05, which calls for 20% reductions of GHG by 2020.

Among the prominent greenhouse gases (GHGs) contributing to the greenhouse effect are carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF6). Each GHG differs in its ability to absorb heat in the atmosphere based on the lifetime, or persistence, of the gas molecule in the atmosphere (known as Global Warming Potential or GWP). Often, estimates of GHG emissions are presented in

carbon dioxide equivalents (CO2e), which weight each gas by its GWP. The following table shows the GWPs for different GHGs for a 100-year time horizon.

Global Warming Potential (GWP) for Greenhouse Gases

GHG Pollutant	GWP
Carbon Dioxide (CO2)	1
Methane (CH4)	21
Nitrous Oxide (N2O)	310
Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs)	Various
Sulfur Hexafluoride (SF6)	23,900

Source: IPCC Second Assessment Report (SAR), 1996

California has taken proactive steps, briefly described below, to address the issues associated with GHG emissions and climate change.

Executive Order S-3-05

Executive Order S-3-05, which was signed by Governor Schwarzenegger in 2005, proclaimed that California is vulnerable to the impacts of climate change. It declared that increased temperatures could reduce the Sierra's snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the Executive Order established total greenhouse gas emission targets. Specifically, emissions are to be reduced to the 2000 level by 2010, the 1990 level by 2020, and to 80% below the 1990 level by 2050.

Assembly Bill 32, The California Climate Solutions Act of 2006

In 2006, Governor Arnold Schwarzenegger signed Assembly Bill (AB) 32, the Global Warming Solutions Act, into legislation. The Act requires that California cap its GHG emissions at 1990 levels by 2020. This legislation requires the California Air Resources Board (CARB) to establish a program for statewide GHG emissions reporting and monitoring/enforcement of that program.

As a part of AB 32, CARB established an emissions inventory for 1990 and a projected limit for 2020. Since climate change is a global and not a regional issue, specific inventories have not been prepared for the individual air basins. The statewide 2020 limit was approved on December 6, 2007, and is not sector-specific. The statewide 2020 limit is based on the total 1990 GHG emissions inventory and is 427 Million Metric Ton (MMT) of CO_2. Since the development of the 1990 emissions inventory, CARB has prepared a statewide inventory for the years 2000 through 2008. A summary of the 2008 statewide emissions inventory is included in the table on the following page.

2008 California Statewide Greenhouse Gas Emission Inventory

Emission Category	2008 (MMT CO_2e)
Transportation	174.99
Electric Power	116.35
Commercial and Residential	43.13
Industrial	92.66
Recycling and Waste	6.71
High GWP	15.65
Agriculture	28.06
Forestry	0.19
Total California Emissions	477.74

Source: California Greenhouse Gas Inventory for 2000-2008 – by Category as defined in the Scoping Plan. Website: http://www.arb.ca.gov/cc/inventory/data/tables/ghg_inventory_scopingplan_00-08_2010-05-12.pdf

Senate Bill 97, Modification to the Public Resources Code (2007)

SB 97, enacted in 2007, amends the CEQA statute to clearly establish that GHG emissions and the effects of GHG emissions are appropriate subjects for CEQA analysis. It directs the Governor's Office of Planning and Research (OPR) to develop draft CEQA Guidelines "for the mitigation of greenhouse gas emissions or the effects of greenhouse gas emission". On June 19, 2008 the Governor's Office of Planning and Research issued a technical advisory titled *CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act (CEQA) Review*. The advisory provides technical guidance for addressing the issue of climate change in CEQA documents.

Analysis as to whether or not project activities would:

a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.

Impact Analysis: The Facility currently generates less than one pound of GHG producing emissions per year. The tray furnaces dry water-laden, non-volatile, non-combustible inorganic sludge. Emissions from the afterburn shall not exceed NOx : 50 ppmvd @ 15% O_2 (0.2 lb/MMBTU) and CO : 350 ppmvd @ 15% O_2 (0.8 lb/ MMBTU). For the Acid Processing Operation the BAAQMD permit limits the operation by not allowing it to exceed 16,000 gallons of hazardous waste to be processed in a 12 month calendar period. The new Permit will authorize new activities that will not generate new greenhouse gas emissions other than the current emissions authorized by the BAAQMD permit.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Impact Analysis: As described below, several initiatives, plans, policies and regulations have been adopted at the local level by BAAQMD relating to reducing GHG emissions. BAAQMD goals and strategies embody California's goals for systematic statewide reduction of GHG emission's found in Executive Order S-3-05 and Assembly Bill (AB) 32, which call for the following reductions of GHG emissions:

- 2000 levels by 2010 (11 percent below business-as-usual)
- 1990 levels by 2020 (25 percent below business-as-usual)
- 80 percent below 1990 levels by 2050

The new DTSC Permit will not conflict with Executive Order S-3-05, and Assembly Bill (AB) 32.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

References Used:

- BAAQMD Web Site, Rule and Regulations, regulations 6, 7, 8, 11
- California 1990 Greenhouse Gas Emissions Level and 2020 Limit. Website: http://www.arb.ca.gov/cc/inventory/1990level/1990level.htm (Accessed December 2010).
- CARB (Staff Proposal on Greenhouse Gas Thresholds of Significance under CEQA Potential Performance Standards and Measures (December 9, 2008)
- California Greenhouse Gas Inventory for 2000-2008 – by Category as defined in the Scoping Plan. Website: http://www.arb.ca.gov/cc/inventory/data/tables/ghg_inventory_scopingplan_00-08_2010-05-12.pdf

8. Hazards and Hazardous Materials

Project Activities Likely to Create an Impact:

Exist Activities Allowed by Current Permit

- Treatment: Treatment of 75,816 gallons per month of liquid hazardous waste and 2,295 tons per month of solid hazardous waste. Evaporation of water and chemical acid solutions to recover precious. Tray furnaces bake dry solid into combustible organics.
- Storage: Storage of up to a maximum of 13,370 gallons of liquid hazardous waste and 253 tons of solid hazardous waste.
- Transportation: Transportation of hazardous waste to the Facility for treatment and shipment off-site to an authorized treatment, storage, or disposal facility (TSDF).

Proposed Additional Project Activities

- Electroplating: Plans call for a portable unit that can be put in the existing cyanide processing tanks. The change will involve additional equipment but will not alter the treatment capacity of the overall cyanide tank system.
- Container Treatment of Acid Solutions: Plans call for the use of new containers (two 55-gallon containers) as an alternative to the existing tank to treat acid solutions.
- Evaporation of Caustic/Cyanide Solutions: Plans call for the enhancement of evaporation of water from waste solution by the introduction of a contactor that would consist of a drum or set of discs on a slowly rotating shaft mounted within the confines of the tanks to increase the surface area for evaporation.
- Conversion of the Acid Waste Storage Tank Area to a container storage area: Plans call for storing containers in a tank area that was previously used to store acids.
- Changes to Tray Furnaces: Plans call for changing the operating temperature for the afterburners, modifying the tray furnace in the primary chamber to accommodate multiple levels of trays, and modifying the second tray furnace by adding a center partition in order to split the primary chamber into two independent chambers.
- Milling and Sampling Area: Plans call for new dust conditioning equipment, a Ballmill, a screen, and a rotary sampler in the Mechanical and Miscellaneous unit.

Description of Baseline Environmental Conditions: The Facility generates and receives cyanide and alkaline precious metal bearing solutions. Solutions are stored in designated areas before and after treatment. Treatment of cyanide solutions includes pH adjustment, electroplating and/or precipitation, Cyanide complexation, and destructions and evaporation. Xstrata generates and receives precious metal bearing acid solutions. Solutions are stored in designated areas before and after treatment. Treatment of acid solutions includes pH adjustment, precipitation, neutralization and/or evaporation to convert precious metals in to solid form. Xstrata uses Tray Furnaces to bake/roast solids containing combustible organics, to dry inorganic sludge and evaporate water from neutral and alkaline solutions to reduce a dry solid amenable to further recovery operations. Xstrata also melt Hazardous Waste solids, sludge, scrap metal, and excluded recyclable materials in Crucible Furnaces to recover, refine, or separate metals. Xstrata employs Mechanical equipment such as grinding, milling, screening, and blending of ash, sludge and other solids in Miscellaneous units to prepare and collect a representative sample of metals analysis for further recovery operations. Dry and wet additives may be combined with treated material to improve handling and flow properties. In addition Xstrata uses additional Mechanical equipment to process UWEDs, Electronic scrap, scrap metal, Electronic Recyclable Material and solid hazardous waste from other treatment units.

Analysis as to whether or not project activities would:

a. Create a significant hazard to the public or the environment throughout the routine transport, use or disposal of hazardous materials.

Impact Analysis: The Facility has a only a small potential risk of release of hazardous wastes because the mandatory secondary containment and the training required for all employees who manage hazardous waste greatly minimize the chances for release. Under the proposed operating conditions the environment impact of a spill will be limited because of the Facility's secondary containment design on all units that store liquid hazardous waste. The secondary containment in these different areas consists of a bermed concrete area coated with a compatible epoxy.

In addition, the operators conduct daily and weekly inspections on the different safety equipment and containment areas as well as the equipment used for the treatment and storage of hazardous waste. The Facility must also train all employees who manage hazardous waste in spill emergencies and facility inspections. In addition the provisions of the Emergency Response Plan, which includes evacuation procedures, a contingency plan, and the Spill Action Plan are required to be carried out immediately. With these safeguards, the proposed project is not anticipated to create a significant hazard to the public or the environment.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Impact Analysis: See analysis provided in section a. above. There is no significant hazard to the public or the environment because all activities are contained inside the facilities.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school.

Impact Analysis: The Facility is located more than one-quarter mile from any existing or proposed school, daycare facility or sensitive receptor. In addition, the Facility is restricted from handling acutely hazardous materials, substances or waste, and has been designed to operate in a manner that would not emit hazardous emissions that may otherwise affect these sensitive receptors.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to public or the environment.

Impact Analysis: The Facility is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and has been designed to operate in a manner that would not create a significant hazard to public or the environment.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

e. Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan.

Impact Analysis: The permit activities will not interfere or impair implementation of an adopted emergency response plan or emergency evacuation. Trucks used for the transportation of hazardous waste are parked either inside the Facility or on back road and do not block the flow of traffic.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

References Used:

- Hazardous Waste Facility Permit Modification, June 28, 2002
- Final Initial Study, April 4, 1994
- Facility Operations Manual, May 2005
- Environmental Information Document, 2006

9. Hydrology and Water Quality

Project Activities Likely to Create an Impact:

Existing Activities Allowed by Current Permit

- Treatment: Treatment of 75,816 gallons per month of liquid hazardous waste and 2,295 tons per month of solid hazardous waste. Evaporation of water and chemical acid solutions to recover precious. Tray furnaces bake dry solid into combustible organics.
- Storage: Storage of up to a maximum of 13,370 gallons of liquid hazardous waste and 253 tons of solid hazardous waste.

Proposed Additional Project Activities

- Container Treatment of Acid Solutions: The proposed Permit allows use of containers (two 55-gallon containers) as an alternative to the existing tank to treat acid solutions.
- Evaporation of Caustic/Cyanide Solutions: The proposed Permit allows enhancement of evaporation of water from waste solution by the introduction of a contactor which would consist of a drum or set of discs on a slowly rotating shaft mounted within the confines of the tanks to increase the surface area for evaporation.

Description of Baseline Environmental Conditions: The Xstrata Recycling Inc. Facility is located between the Guadalupe River and Coyote creek drainage courses that flow northwest and discharge into southern reaches of the San Francisco Bay. The Guadalupe River is located approximately 0.9 miles west of the Facility. Coyote Creek is approximately 1.1 miles east of the Facility and San Francisco Bay is approximately 11.6 miles northwest of the Facility. The Facility has does not have any runoff from permitted units. All hazardous waste units are covered and protected with walls and/or side tarps to prevent rainfall from getting into the permitted units. The only run-off from the Facility is that from areas that have not contact
with hazardous wastes such as parking lots and areas where hazardous waste is not managed. Groundwater flows under unconfined conditions through coarse aquifer materials (sand and gravel). The saturated sand and gravel deposits are separated by discontinuous leaky aquitards consisting predominately of fine silt and clay sediments. The presence of silt and clay layers in the unsaturated zone may contribute to the formation of temporary perched water horizons during the periods of high surficial recharge. Three zones of shallow sediments can be found underneath the facilite. The first zone extends up to 50 feet below the ground surface and is comprised of clay and silty with occasional lenses of silt, silty sand, and sand. This zone is a poor water-bearing layer. The second zone extends from 50-75 feet from the ground surface, consisting of sand and sandy gravel representing the primary shallow water-bearing unit. The third zone extends from 75-105 feet from the ground surface and consists of clayey gravel and sand. Groundwater flows to the north. There are no active drinking water wells within one quarter mile of the Facility. The Facility does not discharge any process water to the City sewer therefore there are no applicable discharge requirements. The Facility submits “zero discharge certificates” semi-annually to the San Jose/Santa Clara Water Pollution Control Plant and is subject to inspection by their personnel. Xstrata Recycling Inc complies with the city ordinance for Zero Discharge and agrees not to discharge processed waste water in to the city sewer. To fulfill the requirement Xstrata Recycling Inc periodically signs a Zero Discharge Certificate

reaffirming that it does not discharge any industrial wastewater to the sanitary sewer system. This is verified periodically by inspectors representing POTW.

Analysis as to whether or not project activities would:

a. Violate any water quality standards or waste discharge requirements.

Impact Analysis: Xstrata Recycling Inc conducts physical treatment which includes size reduction, grinding and screening in the plant area. These treatments are dry and no water or liquid are associated with them. The floor of the entire plant area is constructed on concrete. Treatment and storage of liquid hazardous waste are conducted in coated with epoxy sealing areas. Sumps and berms are provided in these areas to collect liquid in case of spillage. The collected liquid is then pumped back into drums or tanks for treatment. All collected wastewater that might get into the secondary containment areas is collected in drums and sent to an authorized TSDF as hazardous for further treatment or disposal. Further, as explained above, the Facility does not discharge any process water to the City sewer therefore there are no applicable discharge requirements. The Facility submits "zero discharge certificates" semi-annually to the San Jose/Santa Clara Water Pollution Control Plant and is subject to inspection by their personnel. Xstrata Recycling Inc. is required to comply with the city ordinance for Zero Discharge, which bans discharge processed waste water in to the city sewer. To fulfill the requirement Xstrata Recycling Inc periodically signs a Zero Discharge Certificate reaffirming that it does not discharge any industrial wastewater to the sanitary sewer system. As a result, the proposed project does not have the potential to violate any water quality standards or waste discharge requirements

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficient in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted).

Impact Analysis: Currently the Facility does not deplete groundwater supplies or interfere substantially with groundwater recharge. The Facility gets its water from the San Jose Municipal District and the new Permit will not change this or authorize the Facility to deplete any groundwater supplies or interfere with groundwater recharge.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on or off-site.

Impact Analysis: No existing drainage pattern of the Facility or surrounding area would be affected by the project. The Facility's treatment and storage activities and storm water management are conducted in accordance with the storm Water Pollution Prevention Plan for industrial storm water discharges. The project activities do not include the release of any water which could result in erosion or siltation on or off-site. The proposed project does not have any run-off and all collected water that could be accumulated on the secondary containment areas of the different units will be collected and managed as hazardous waste.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact

☒ No Impact

d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off-site.

Impact Analysis: There are no streams or rivers located with in the project area. The permit activities will not affect any existing drainage pattern. The proposed activities are storage and treatment of hazardous waste and do not include any alterations to any stream or river, which could result in runoff flooding on or off-site.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

e. Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.

Impact Analysis: The permit activities will not create or contribute to runoff because water is confined and evaporated, therefore, will not exceed the capacity of existing or planned storm water. All water accumulated in authorized units is tested for hazardous waste and managed as a hazardous waste.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

f. Otherwise substantially degrade water quality.

Impact Analysis: The proposed permit will not substantially degrade water quality since the water that is accumulated in authorized units is tested for hazardous constituents, and it is managed as a hazardous waste and shipped to an authorized TSDF.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

g. Place within a 100-flood hazard area structures which would impede or redirect flood flows.

Impact Analysis: The Facility is located in a 100-year floodplain area. There are two flood zones: Zone A01 and Zone A02. The front part of the Facility is in Zone A01 and is subject to a flooding depth of 2 feet. The southern/western part of the Facility is Zone A02 and is subject to about one foot depth. The Facility is located 0.9 miles northeast of the Guadalupe River, at the edge of the flood zone boundary. The flooding effect on the Facility is not expected to be a dynamic flow due to the gentle slope of the surrounding area and the fact that the Facility is not in close proximity to the River. During severe storm events, and high water conditions in the river, the storm drains may be inundated preventing drainage and creating shallow ponds at the Facility. However, Xstrata has in place a Flood Contingency Plan. If flood warnings for the area are announced, the emergency response coordinator must direct that some or all of the following measures be taken to prevent a significant hazardous waste release as a consequence of flooding.

- Move Waste Off-site. If sufficient warning is received, the emergency coordinator must contact companies listed in the Facility's emergency response plan to reduce the inventory.
- Move Waste to More Protected Locations, Cyanide solutions from containers may be pumped into treatment and storage tanks.

- Store drums may be stored in the spent cyanide storage area. The bulk treatment and storage tanks secondary containment system with its 1.5 ft berm offers greater protection than the stripping room. Solid/liquid hazardous waste may be moved to the loading dock in the receiving area. The loading dock is elevated above the worst case flood depth.
- Elevate or Protect in Place. Acid waste containers are typically stored on secondary containment pallets which are higher than 2 feet. Any containment pallets not already in use could be used to protect waste containers.
- Wastes may be placed on additional pallets or drums to raise their elevation in any location. Priority will be given to hazardous waste in bags, fiber drums, or fiber cubic yard boxes. Metal and plastic drums are not expected to undergo deterioration during the short duration of a flood.
- Additionally, personnel and equipment will be used to move hazardous wastes to safe areas.
- If needed, additional equipment or personnel will be requested from emergency response companies listed in the above noted Facility's Emergency Response Plan.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

h. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.

Impact Analysis: There are no dams or related structures that can cause injury or death from flooding within the project boundary or surrounding area because there are no dams or related structures near the project or surrounding area.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

i. Inundation by sieche, tsunami or mudflow.

Impact Analysis: Tsunamis are large ocean waves that are generated by major seismic events. Storms at sea also can generate heavy waves. Both have the potential to cause flooding in low-lying coastal areas. The Facility is located in the city of Santa Clara, well away from the Pacific Ocean, and is therefore not located in a tsunami hazard area. A seiche is a surface wave created when a body of water is shaken; usually by earthquake activity. Inundation from a seiche can occur, for example, if a wave overflows a containment wall, such as the wall of a reservoir, water storage tank, dam or other artificial body of water. The Lexington Reservoir Dam is not expected to be a significant hazard to Santa Clara since the city is nine miles from the reservoir. Similarly, because of the distance between Santa Clara and San Francisco Bay (and the intervening salt ponds and levees) is expected to provide protection against seiches at the Facility. The topography at the Facility and surrounding area is flat and highly developed. There are no hills nearby. Since the area is flat and developed, the potential for inundation by mudflow is negligible.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

References Used:

- Hazardous Waste Facility Permit Modification, June 28, 2002
- Final Initial Study, April 4, 1994
- Facility Operations Manual, May 2005
- Environmental Information Document, 2006

10. Land Use and Planning

Project Activities Likely to Create an Impact: None

Description of Baseline Environmental Conditions: Land use at the Facility is governed by the City of San Jose General Plan and Zoning Ordinance. The City of San Jose General Plan is an adopted statement of goals and policies for the future character and quality of development of the community. The Zoning Ordinance establishes various districts within the City and specifies the lawful and unlawful uses within the districts to encourage the most appropriate use of land within the City. The Facility is located in an area zoned by the City of San Jose's adopted General Plan as "HI"- heavy industry. This location was designated as "HI" -heavy industry prior to Xstrata's occupation.
The heavy industrial zoning and General Plan land use designation are intended for industrial uses with hazardous characteristics that for reasons of health, safety, environmental effects, or welfare are best segregated from other uses. Very limited scale retail sales and service establishments serving nearby businesses and their employees may be considered appropriate where such establishments do not restrict or preclude the ability of surrounding HI Heavy Industrial land from being used to its fullest extent and are not of a scale or design that depend on customers from beyond normal walking distances. Any such uses should be clearly incidental to the industrial user on the property and integrated within an industrial building.

Analysis as to whether or not project activities would:

a. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

   Impact Analysis: The Facility is located in an area zoned by the City of San Jose as HI and the new Permit will not allow for any construction of new units. The new Permit will only allow installation of new equipment to existing units and will not conflict with any applicable land use plan, policy, or regulation.

   Conclusion:
   ☐ Potentially Significant Impact
   ☐ Potentially Significant Unless Mitigated
   ☐ Less Than Significant Impact
   ☒ No Impact

b. Conflict with any applicable habitat conservation plan or natural community conservation plan.

   Impact Analysis: The City of San Jose does not have provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan for the area where the Facility is located. The City of San Jose has zoned the area where the Facility is located as HI Heavy Industrial. Therefore, the new Permit will not conflict with any adopted habitat conservation plan or natural community conservation plan.

   Conclusion:
   ☐ Potentially Significant Impact
   ☐ Potentially Significant Unless Mitigated
   ☐ Less Than Significant Impact
   ☒ No Impact

References Used:

11. Mineral Resources

Project Activities Likely to Create an Impact: None.

Description of Baseline Environmental Conditions: There are no naturally occurring mineral resources or recovery sites located at or near the Facility. The area surrounding the Facility is flat, paved and developed, and zoned "HI" for heavy industry. Therefore, no further analysis is deemed necessary.

Analysis as to whether or not project activities would:

a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.

Impact Analysis: Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☐ No Impact

b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

Impact Analysis:

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☐ No Impact

References Used:

12. Noise

Project Activities Likely to Create an Impact:

Existing Activities Allowed by Current Permit

- Treatment: Treatment of 75,816 gallons per month of liquid hazardous waste and 2,295 tons per month of solid hazardous waste.
- Storage: Storage of up to a maximum of 13,370 gallons of liquid hazardous waste and 253 tons of solid hazardous waste.
- Transportation: Transport of hazardous waste to the facility for treatment and ship off-site to an authorized treatment, storage, or disposal facility (TSDF).

Proposed Additional Project Activities

- Electroplating: Plans call for a portable unit that can be put in the existing cyanide processing tanks. The change will involve additional equipment but will not alter the treatment capacity of the overall cyanide tank system.
- Conversion of the Acid Waste Storage Tank Area to a container storage area: Plans call for storing containers in a tank area that was previously used to store acids.
- Changes to Tray Furnace: Plans call for changing the operating temperature for the afterburners, modifying the tray furnace in the primary chamber to accommodate multiple levels of trays, and modifying the second tray furnace by adding a center partition in order to split the primary chamber into two independent chambers.
- Milling and Sampling Area: Plans call for new dust conditioning equipment, a Ballmill, a screen, and a rotary sampler in the Mechanical and Miscellaneous unit.

Description of Baseline Environmental Conditions: The Facility area is approximately 2.2 acres and as noted above, is zoned HI Heavy Industrial. The main building including offices, warehouse, and treatment and storage areas are located at the east end of the Facility. Treatment activities involving crushing, grinding, screening, and melting take place inside the main building and can generate substantial noise levels. The City of San Jose Noise Element in the General Plan utilizes the Day-Night Level (DNL) 24-hour noise descriptor to define community noise impacts, and

specifies that exterior noise exposures at the property line do not exceed 60dB DNL. The interior noise requires that operations not exceed 85-95dB DNL.

Analysis as to whether or not project activities would:

a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

Impact Analysis: The Facility currently operates one shift per day, five days a week. Staggered start times for various operators result in the working hours raging from approximately 6:00 a.m. to 5:30 p.m., overtime is occasionally worked in the early evening and on Saturdays. Noise generated in the processing area is generally in the range of 85 dBA to 95 dBA. Workers are provided with hearing protection devices to protect against excessive noise exposure. The Facility treatment and storage activities will not exceed the standards as noted above in the Setting.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

b. Exposure of persons to or generation of excessive groundbourne vibration or groundbourne noise levels.

Impact Analysis: As noted above in subsection (a) the routine treatment and storage activities at the Facility including such treatment activities as crushing, grinding, screening, and melting take place inside the main building and can generate substantial noise levels. However, workers are equipped with appropriate ear protection and due to the location of the above noted processes, the closest sensitive receptor (adjacent trailer park) is approximately 250 feet from the noise source. Therefore, it is unlikely that the noise level will be excessive or exceed established noise standards.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

c. A substantial permanent increase in ambient noise levels in the vicinity above levels existing without the project.

Impact Analysis: As noted above in subsection (a) and (b), the noise is staggered and generally limited to typical work day hours (6:00 a.m. – 5:30 p.m.). Additionally, the area surrounding the Facility is zoned HI Heavy Industrial and the vicinity is generally characterized by commercial businesses that also generate noise. No significant changes in activities are proposed for the new Permit, therefore no permanent increase in the ambient noise levels

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

Impact Analysis: The Facility currently operates one shift per day, five days a week. Staggered start times for various operators result in the working hours raging from approximately 6:00 a.m. to 5:30 p.m., and overtime is occasionally worked in the early evening and on Saturdays. Noise generated in the processing area is generally in the range of 85 dBA to 95 dBA. Workers are provided with hearing protection devices to protect against excessive noise exposure. The Facility treatment and storage activities will not exceed the standards as noted above in the Setting. The routine treatment and storage activities at the Facility including such treatment activities such as crushing, grinding, screening, and melting take place inside the main building and can generate substantial noise levels, however,

workers are equipped with appropriate ear protection and due to the location of the above noted processes, the closest sensitive receptor (adjacent trailer park) is approximately 250 feet from the noise source. Therefore, it is unlikely that the noise level will be excessive or exceed established noise standards. The proposed project will not cause a substantial or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

References Used:

13. Population and Housing

Project Activities Likely to Create an Impact: None.

Description of Baseline Environmental Conditions: The project is a proposed new Permit for existing Facility operations with minor changes to certain processing activities, with no impact to population and housing. Therefore, no further analysis is deemed necessary.

Analysis as to whether or not project activities would:

a. Induce substantial population growth in area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).

Impact Analysis: Conclusion:

☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☐ No Impact

b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.

Impact Analysis:

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☐ No Impact

c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

Impact Analysis:
Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☐ No Impact

References Used:

14. Public Services

Project Activities Likely to Create an Impact: None.

Description of Baseline Environmental Conditions: There are two fire stations near the Facility, each approximately one mile from the Facility. Adequate fire extinguishers are provided in various areas of the Facility as required by the San Jose Fire Department, which granted the Facility a Fire Safety permit. The Facility has a Contingency Plan for emergencies in case of fires and earthquakes. The Facility has site security on staff in addition to the 10 feet high chain link fence to the north and west side of the Facility, along with a 10 feet sheet metal fence located on the south side. Each fenced side is topped by a three strands of barbed wire. The Facility yard has two gates and the back yard area has one gate. All three gates are on the south side of the Facility. The gate in the back yard remains padlocked except under special circumstances. The two gates in the main yard are opened for commercial and company traffic. Xstrata employs security at all entrances and the Facility yard is monitored by security using remote cameras. The project is a Permit for existing Facility operations with minor changes to certain processing activities, with no impact to Public Services. Therefore, no further analysis is deemed necessary.

Analysis as to whether or not project activities would:

a. Result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:

- ❖ Fire protection
- ❖ Police protection
- ❖ Schools
- ❖ Parks
- ❖ Other public facilities

Impact Analysis:

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☐ No Impact

References Used:

- Environmental Information, Xstrata Recycling, DTSC Form 1176.

15. Recreation

Project Activities Likely to Create an Impact: None.

Description of Baseline Environmental Conditions: There are no recreational areas or regional parks at or near the Facility. The nearest recreational resource is the San Jose Trail Network at Guadalupe river, 1.1 miles from the Facility. Truck traffic entering or leaving the Facility will not use transportation routes at or near Guadalupe river trail system. The entire area surrounding Facility is paved, developed, and zoned as HI Heavy Industrial. Therefore, no further analysis is deemed necessary.

Analysis as to whether or not project activities would:

a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

Impact Analysis:

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☐ No Impact

b. Include recreational facilities or require construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

Impact Analysis:

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☐ No Impact

References Used:

16. Transportation and Traffic

Project Activities Likely to Create an Impact:

- Transportation: Haulers' transport of incoming and outgoing hazardous and non-hazardous waste to the Facility for treatment and shipment off-site to an authorized treatment, storage, or disposal facility (TSDF). Employee's trips to and from work.

Description of Baseline Environmental Conditions: The regional access to the Facility is provided via State Route (SR) 87, Highway (US 101), and Interstate 280 (I-280). SR 87 is a north /south six-lane (two mixed-flow lanes and one high-occupancy vehicle (HOV) lane in each direction) freeway in the vicinity of the project site. Regional access to the Facility is provided via its interchanges at Lelong Street and Almaden Expressway. US 101 is an eight-lane (three mixed-flow lanes and one HOV lane in each direction) freeway in the vicinity of the Facility. It extends north through San Francisco and south through Gilroy. Reginal access to the project site is provided via its interchanges with Tully Road and Story Road. I-280 is a north/south eight-lane freeway (three mixed-flow lanes and one HOV lane in each direction) but is generally oriented east/west in the vicinity of downtown San Jose. Regional access to the project site is provided via its interchanges with Vine Street, First Street, Seventh Street, Tenth Street, and Eleventh Street.
The local access to the project site is provided via Monterey Road and Barnard Avenue. Monterey Road (SR 82) is a state highway that is a north/south six-lane arterial that runs along the western boundary of the project site. Monterey Road would provide direct access to the project site via Barnard Avenue. E. Alma Avenue is an east/west four-lane arterial. Alma Avenue will provided access to the Facility via Monterey Road. Keys Street is an east/west roadway that extends from Monterey Road to Story Road. Keyes provides access to the project site via Monterey Road. Curtner Avenue is an east/west four-lane arterial that connects to Tully Road just east of Monterey Road. Curtner Avenue connects SR 87 to Monterey Road.
Level of Service is a qualitative description of operating conditions ranging from LOS A, or free-flowing conditions with little or no delay, to LOS F, or jammed conditions with excessive delays. The following table correlates between average delay and level of service:

Singalized Intersection Level of Service Definitions Based on Delay		
Level of Service	Description	Average Control Delay per Vehicle
A	Operations with very low delay occurring with favorable progression and/or short cycle lengths.	10.0 or less
B	Operations with low delay occurring with good progression and/or short cycle lengths.	10.1 to 20.0
C	Operations with Average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.1 to 35.0

D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high volume to capacity (V/C) ratios. Many vehicles stop and individual cycle failures are noticeable.	35.1 to 55.0
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	55.0 to 80.0
F	Operation with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths.	Greater than 80.0

The City of San Jose considers intersection operations of LOS D or better during the Peak Hours to be acceptable.

The Facility is located in an industrial area on the corner of Monterey Highway and Barnard Avenue. Hazardous waste shipments are delivered at the loading dock immediately inside the back gate. In some cases, waste shipments may be loaded and unloaded using a forklift in the yard. Outgoing hazardous waste shipments are either picked-up at the loading dock if the waste is containerized or at the appropriate bulk waste storage area. Trucks turn around and access deliveries or pick-ups in the yard area. Typically only one truck is present in the yard at any given time. Parked trucks waiting to be loaded or unloaded are along Barnard Avenue. The Facility currently uses approximately 1 to 10 trucks per day. Analysis of the existing intersection operations concluded that all of the study intersections currently operate at an acceptable LOS. The results of the existing conditions analysis are summarized in the following table:

Existing Intersection Levels of Service				
Intersection	AM Peak Hour		PM Peak Hour	
	Delay	LOS	Delay	LOS
Monterey Road and San Jose Avenue	11.5	B	14.4	B
Monterey Road and Phelan Avenue	14.7	B	23.6	C
Monterey Road and GE DW (East)	10.47	B	22.1	C
Monterey Road and Curtner Avenue (CMP)	41.2	D	51.5	D
First Street and Keyes Street (CMP)	25.2	C	30.5	C
Second Street and Keyes Street	20.3	C	29.6	C
Seventh Street and Keyes Street	31.3	C	32.6	C
Tenth Street and Keyes Street	20.8	C	25.1	C
Eleventh Street and Keyes Street	23.4	C	21.5	C
Lelong Street and W. Alma Avenue	35.8	D	33.4	C
Vine Street and W. Alma Avenue	8.8	A	19	B

Currently Xstrata Recycling Inc runs one shift per day. The shift starts at 6:00 a.m. every morning and ends at 3:00 p.m. in the afternoon. Peak traffic for employees is expected between 6:00 a.m. to 8:30 a.m. Usually trucks come early in the morning between 7:00 a.m. to 11:00 a.m. and are not expected to come after 3:00 p.m. Traffic associated with Facility storage and treatment operations during daytime shifts are consistent with the general traffic flow around the vicinity of the Facility.

Analysis as to whether or not project activities would:

a. Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections).

Impact Analysis: As stated in the above, Currently Xstrata Recycling Inc runs one shift per day. The shift starts at 6:00 a.m. every morning and ends at 3:00 p.m. in the afternoon. Peak traffic for employees is expected between 6:00 a.m. to 8:30 a.m. Usually trucks come early in the morning between 7:00 a.m. to 11:00 a.m. and are not expected to come after 3:00 p.m. Traffic associated with Facility storage and treatment operations during daytime shifts are consistent with the general traffic flow around the vicinity of the Facility. The Facility currently uses approximately 1 to 10 trucks per day. The proposed Permit will not increase the amount of trucks currently used or the time of operations and will not cause an increase in traffic substantial in relation to the existing traffic load and capacity.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

b. Exceed, either individually or cumulatively, a level of service standard established by the country congestion management agency for designated roads or highway.

Impact Analysis: There will be no increase in traffic congestion as a result of permitted activities. The majority of the project activities occur within the Facility. As stated above, 1 to 10 trucks trips per day are anticipated during project activities, no new traffic will be generated and traffic will not exceed the level of service standard. There will be no long-term operational traffic impacts. There will be no long-term operational traffic impacts.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

c. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

Impact Analysis: There are no changes being proposed that would otherwise result in substantially increasing hazards due to a design feature or incompatible uses. Implementation of the proposed permit would not result in the alteration of any transportation routes, (roads or country bicycle routes that are currently in use), utilize incompatible equipment, or create an increase in traffic hazards.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

d. Result in inadequate emergency access.

Impact Analysis: As noted in subsection (a), there are three gates allowing vehicle entrances/exits to/from the Facility, therefore there is adequate emergency access to and from the Facility.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

e. Result in inadequate parking capacity.

Impact Analysis: Parking will not increase as a result of project activities and remains unchanged and adequate for the current use.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

f. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).

Impact Analysis: The project is a proposed draft permit with only minor changes to Facility processing activities and will not pose a conflict with adopted policies, plans, or programs supporting alternative transportation.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

References Used:

- Hazardous Waste Facility Permit Modification, June 28, 2002
- Environmental Information Document, 2006
- Final Initial Study, April 4, 1994
- Facility Operations Manual, May 2005
- City of San Jose, Department of Planning, Building and Code Enforcement (http://www.sanjoseca.gov/planning/zoning/zoning.asp)
- Draft EIR for the Sun Garden Redevelopment Project, City of San Jose

17. Utilities and Service Systems

Project Activities Likely to Create an Impact: None.

Existing Activities Allowed by Current Permit

- Treatment: Treatment of 75,816 gallons per month of liquid hazardous waste and 2,295 tons per month of solid hazardous waste. Evaporates water and chemical acid solutions to recover precious. Tray finances bake dry solid into combustible organics.
- Transportation: Transport of hazardous waste to the Facility for treatment and ship off-site to an authorized treatment, storage, or disposal facility (TSDF).

Proposed Additional Project Activities

- Electroplating: Plans call for a portable unit that can be put in the existing cyanide processing tanks. The change will involve additional equipment but will not alter the treatment capacity of the overall cyanide tank system.
- Evaporation of Caustic/Cyanide Solutions: Plans call for the enhancement of evaporation of water from waste solution by the introduction of a contactor that would consist of a drum or set of discs on a slowly rotating shaft mounted within the confines of the tanks to increase the surface area for evaporation.

Description of Baseline Environmental Conditions: The Facility is located in a developed industrial area with established utilities and service systems provided by the City of San Jose. The Xstrata Facility gets water from San Jose Water Company.

Analysis as to whether or not project activities would:

a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.

Impact Analysis: The proposed permit does not discharge any process water to the City sewer therefore there are no applicable discharge requirements (see section 9. Hydrology and Water Quality above).

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

Impact Analysis: The proposed permit will not require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

Impact Analysis: The proposed Permit will not require or result in the construction of new storm water drainage facilities or expansion of existing facilities. Liquid wastes are evaporated via Tray furnaces bake dry solid into combustible organics for disposal.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed.

Impact Analysis: The proposed Permit has sufficient water supplies available and will not require new or expanded entitlements for water supply are provided by the San Jose Water Company.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

e. Result in determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the projects projected demand in addition to the providers existing commitments.

Impact Analysis: The proposed Permit will manage all waste water from authorized units as hazardous waste and will either treat the waste water in their operation or transport it to a permitted Facility for further treatment and/or disposal.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

f. Be served by a landfill with sufficient permitted capacity to accommodate the projects solid waste disposal needs.

Impact Analysis: The Facility operating pursuant to the proposed Permit will not need to be immediately served by a landfill with sufficient permitted capacity. All hazardous waste transported out of the Facility is transported to an authorized TSDF for further treatment and/or disposal.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

g. Comply with federal, state, and local statutes and regulations related to solid waste.

Impact Analysis: The proposed Permit is a Series A Standardized permit that requires the Facility to comply with federal, state, and local statutes and regulations related to solid hazardous waste.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

References Used:

- Hazardous Waste Facility Permit Modification, June 28, 2002
- Environmental Information Document, 2006
- Final Initial Study, April 4, 1994
- Facility Operations Manual, May 2005

Mandatory Findings of Significance

Based on evidence provided in this Initial Study, DTSC makes the following findings:

a. The project ☐ has ☒ does not have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory.
b. The project ☐ has ☒ does not have impacts that are individually limited but cumulatively considerable. “Cumulatively considerable” means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.

c. The project ☐ has ☒ does not have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly.

Determination of Appropriate Environmental Document:

Based on evidence provided in this Initial Study, DTSC makes the following determination:

☒ The proposed project COULD NOT HAVE a significant effect on the environment. A **Negative Declaration** will be prepared.

☐ The proposed project COULD HAVE a significant effect on the environment. However, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A **Mitigated Negative Declaration** will be prepared.

☐ The proposed project MAY HAVE a significant effect on the environment. An **Environmental Impact Report** is required.

☐ The proposed project MAY HAVE a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An **Environmental Impact Report** is required, but it must analyze only the effects that remain to be addressed.

☐ The proposed project COULD HAVE a significant effect on the environment. However, all potentially significant effects (a) have been analyzed adequately in an earlier Environmental Impact Report or Negative Declaration pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier Environmental Impact Report or Negative Declaration, including revisions or mitigation measures that are imposed upon the proposed project. Therefore, nothing further is required.

Certification:

I hereby certify that the statements furnished above and in the attached exhibits, present the data and information required for this initial study evaluation to the best of my ability and that the facts, statements and information presented are true and correct to the best of my knowledge and belief.

//Original signed by//		10-20-2011
Preparer's Signature		Date
Alejandro Galdamez	Hazardous Substances Engineer	510-540-3933
Preparer's Name	Preparer's Title	Phone #
//Original signed by//		10-20-2011
Branch or Unit Chief Signature		Date
Alfred Wong	Senior Hazardous Substances Engineer	510-540-3946
Branch or Unit Chief Name	Branch or Unit Chief Title	Phone #

ATTACHMENTS

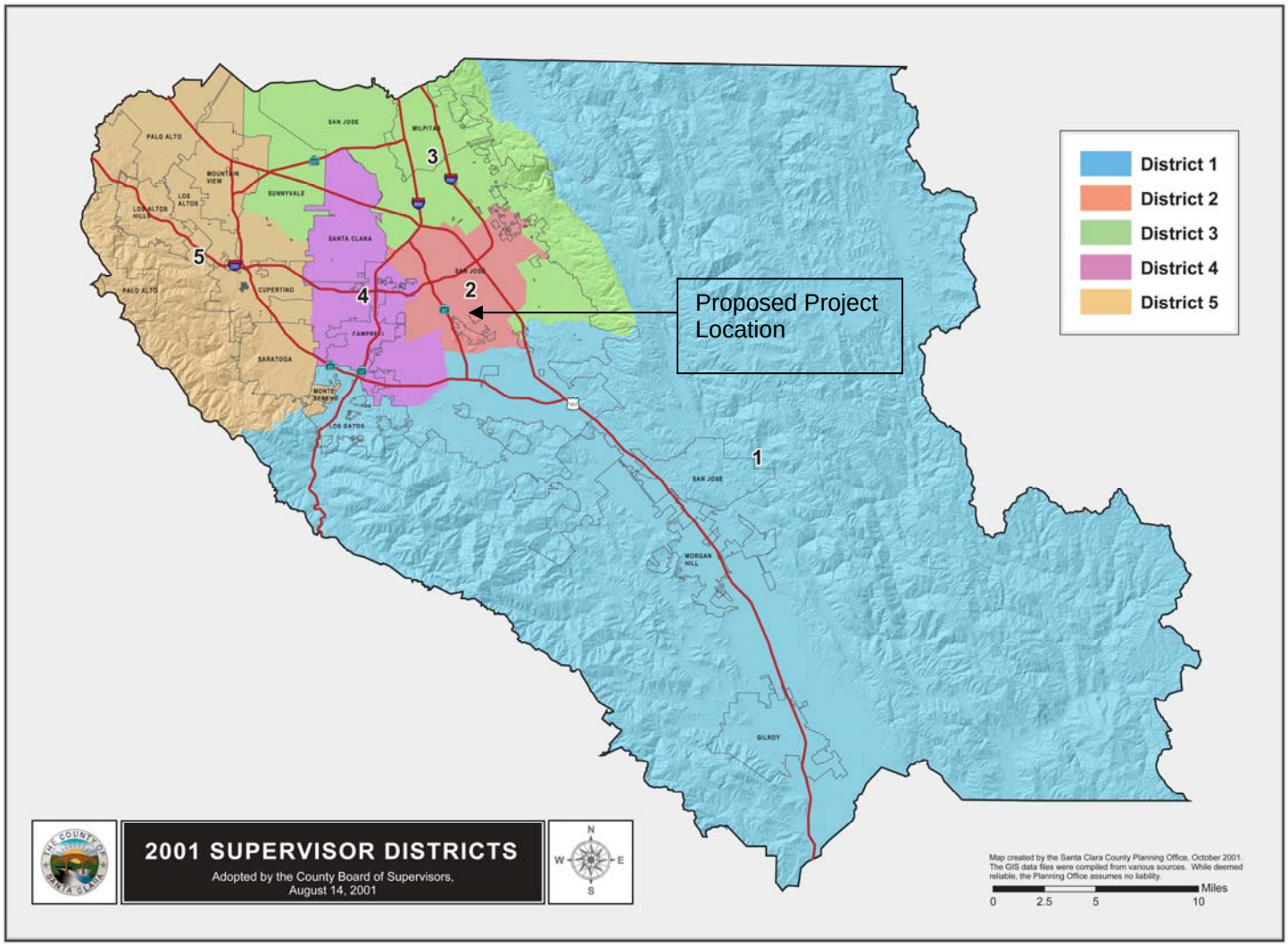

Figure 1

Santa Clara County Map

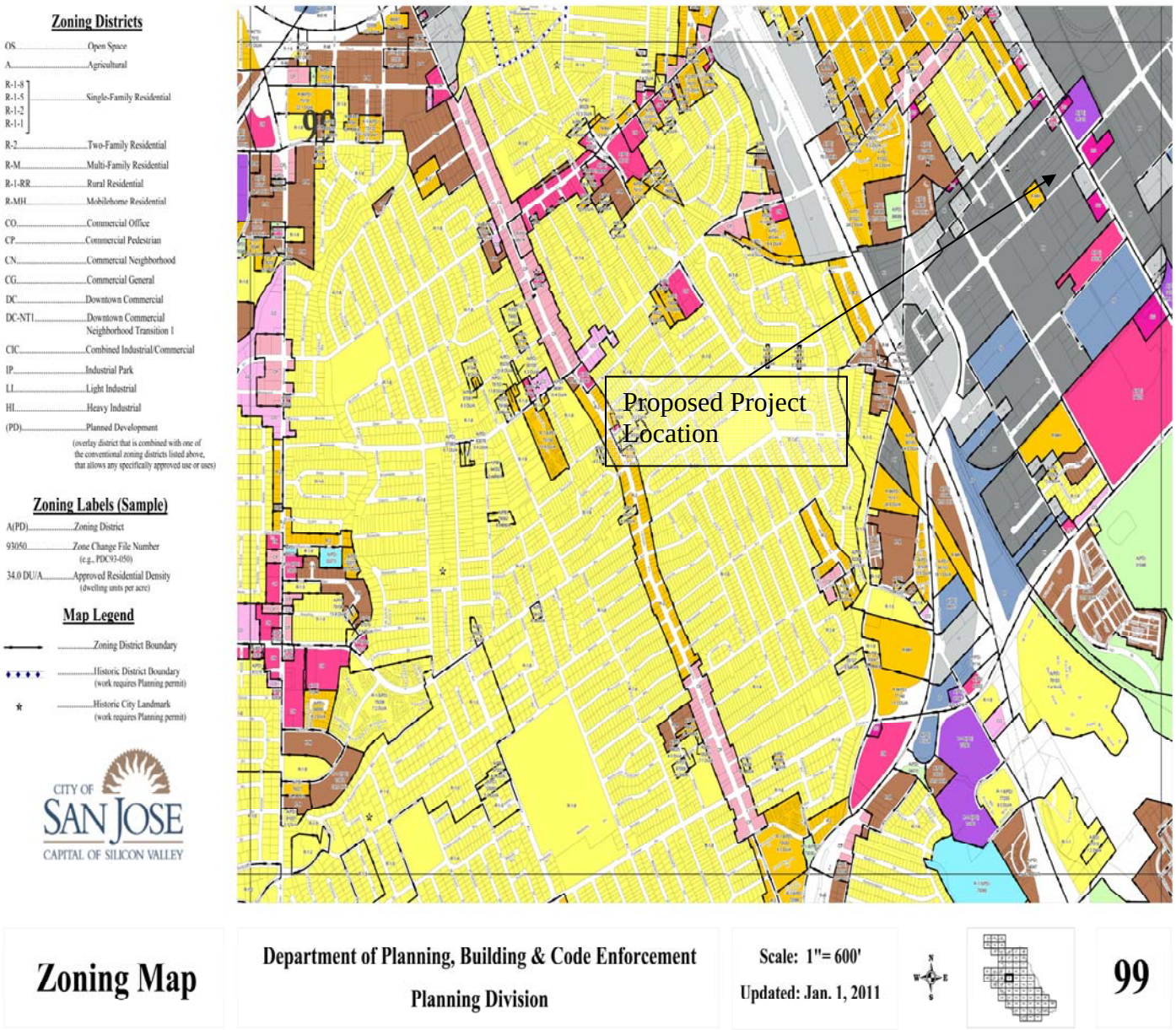

Figure 2

City of San Jose Zoning Map

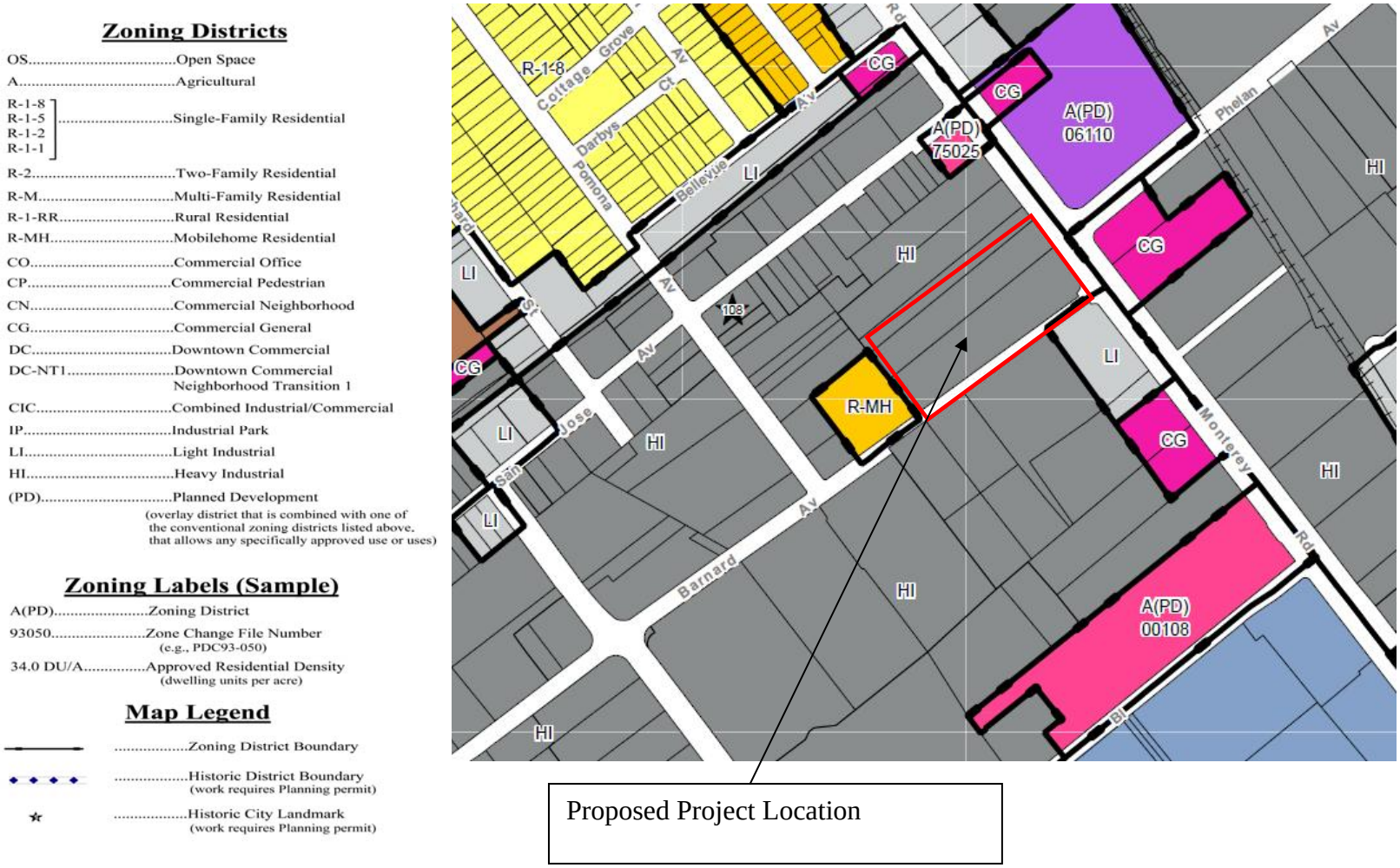

Figure 3

City of San Jose Zoning Map Close-up

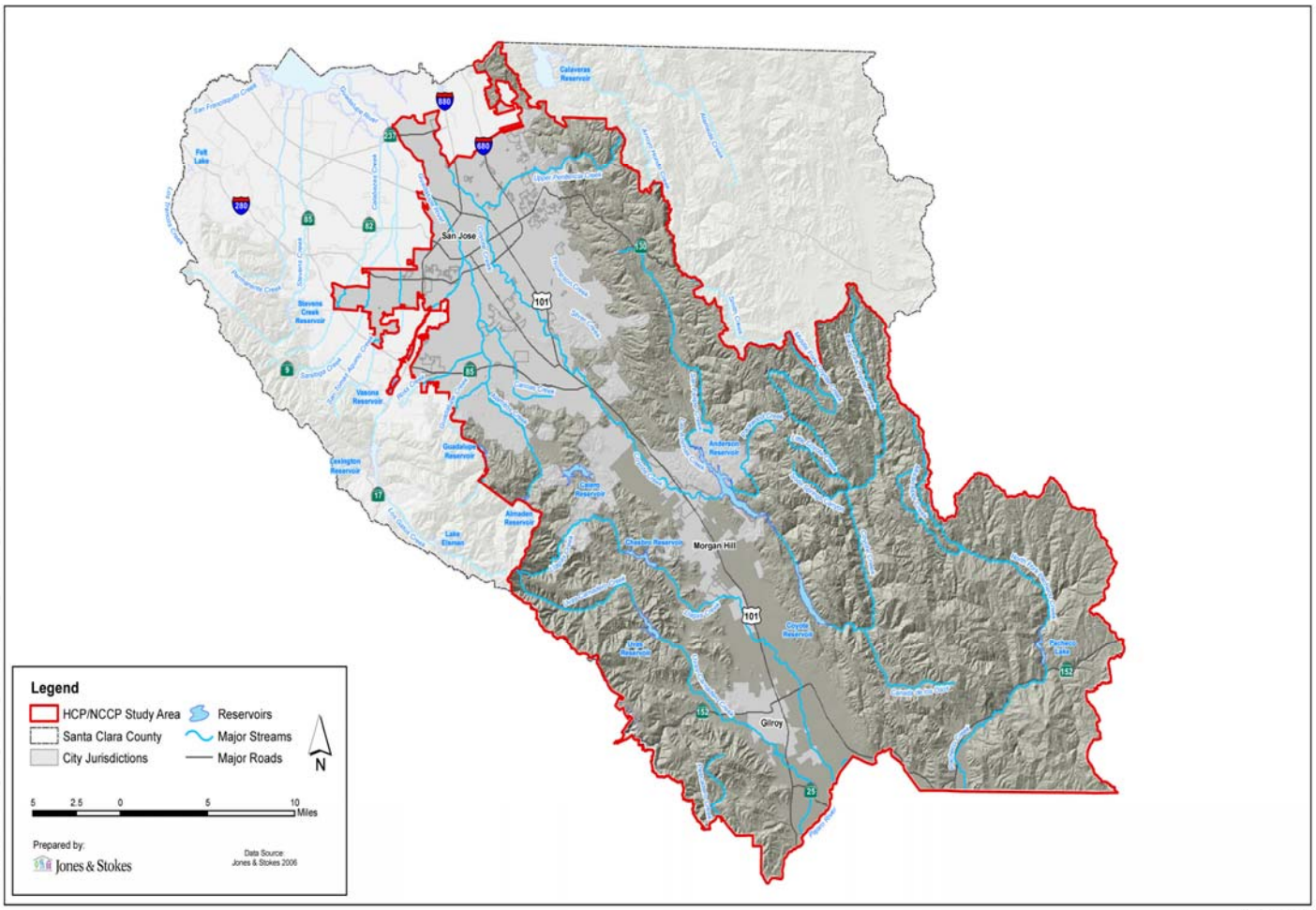

Figure 1-2
Santa Clara Valley HCP/NCCP Study Area

Figure 5

Environmental Study Map San Jose

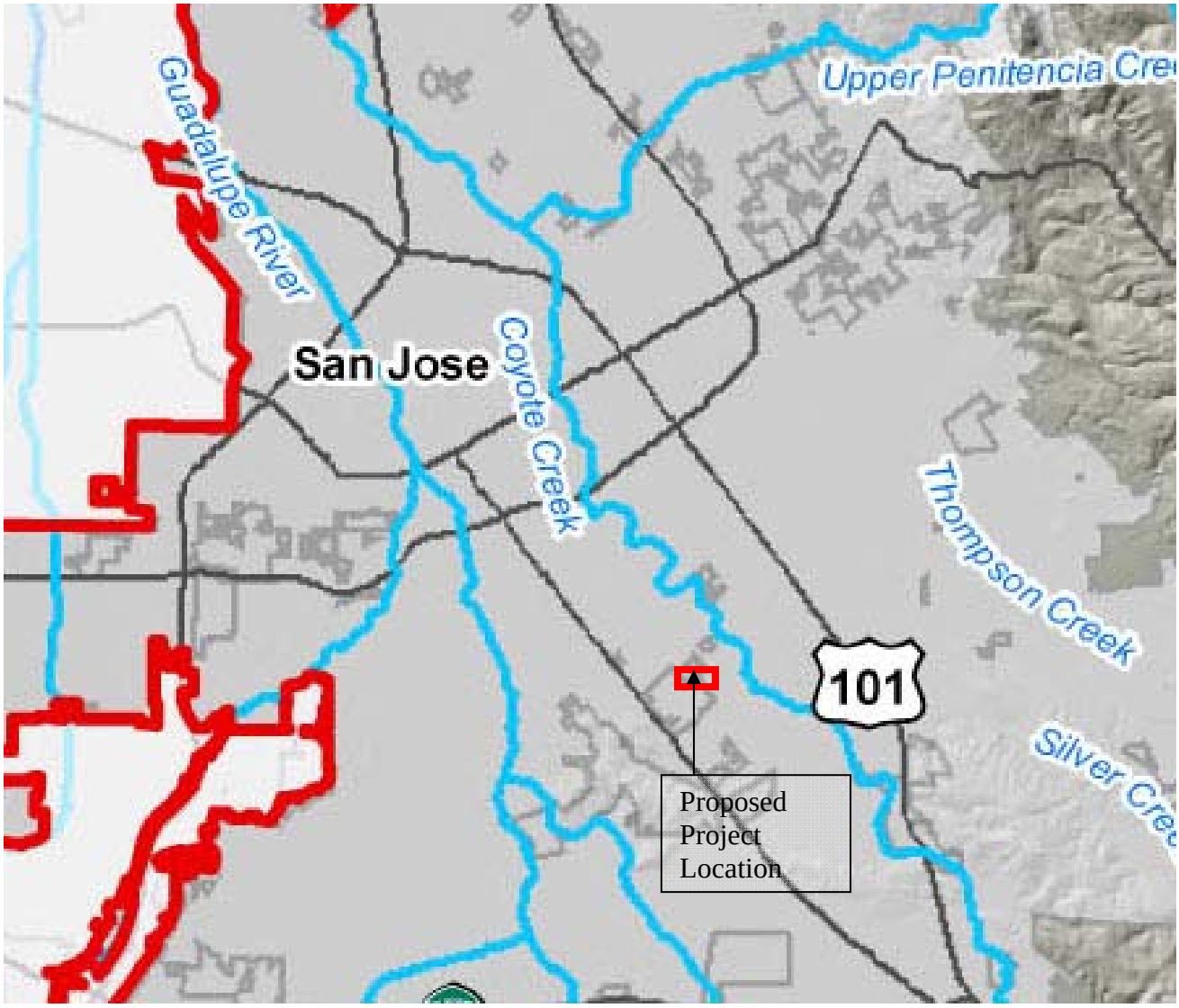

Figure 6

Riparian Delineation

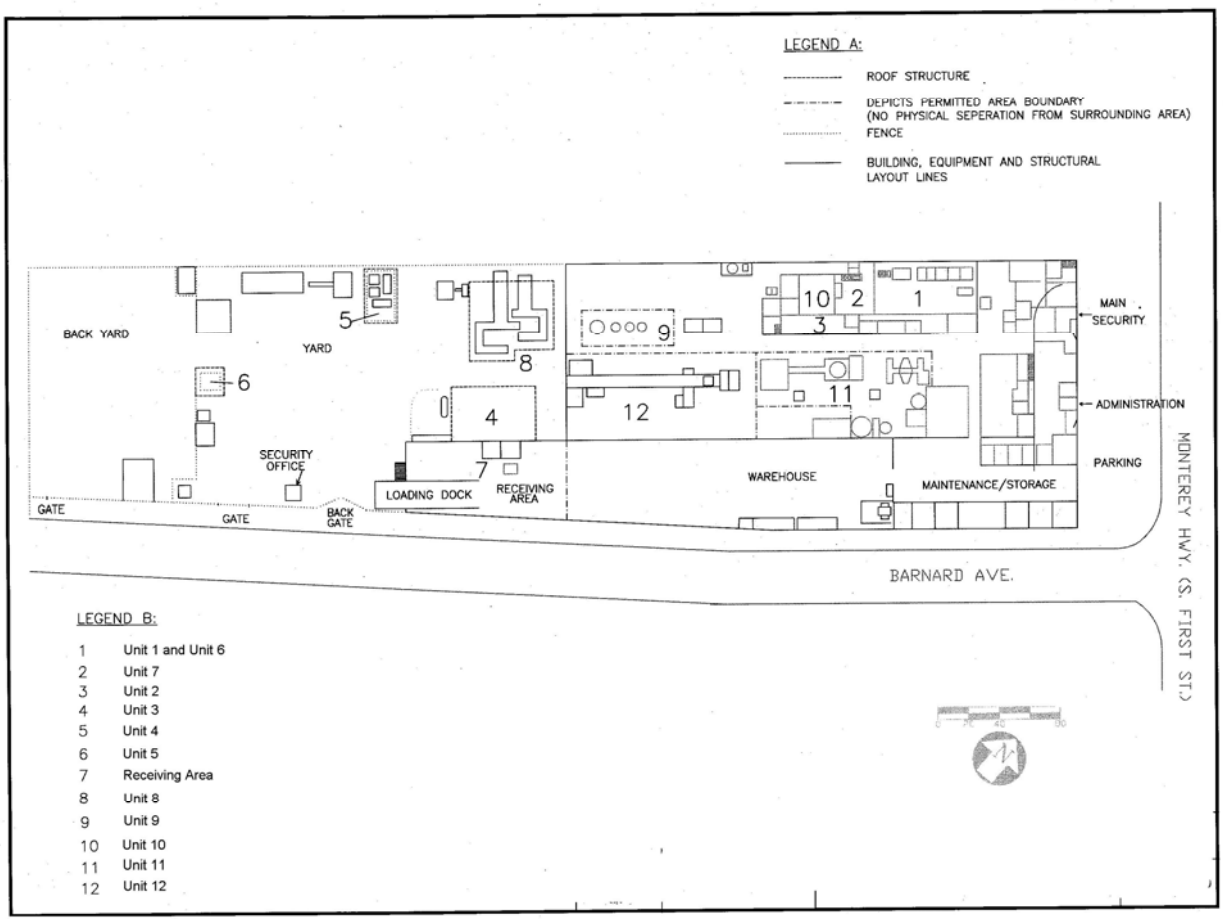

Figure 7

Unit Location